



Attorney's Docket No.: 042390.P11843

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Patent Application of:

Tony G. Hamilton, et al.

Application No: 09/896,563

Filing Date: June 28, 2001

**For: A METHOD TO PROVIDE  
DIRECT SYSTEM STORAGE  
ACCESS WITHIN A NOTEBOOK  
COMPUTER VIA A WIRELESS  
INTERCONNECT AND A LOW  
POWER HIGH-SPEED DATA  
MANAGEMENT BUS WHILE THE  
MAIN CPU IS IDLE**

Examiner: Jude Jean Gilles

Art Unit: 2143

**FIRST CLASS CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313

on November 1, 2005

Date of Deposit

Trina Chau

Name of Person Mailing Correspondence

Signature

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**APPELLANT'S BRIEF TRANSMITTAL**

Sir:

Enclosed for consideration is Appellant's Appeal Brief pursuant to C.F.R. §1.192 for the above-referenced case. This Brief is submitted in response to the Final Office Action mailed from the Examiner on July 1, 2005.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

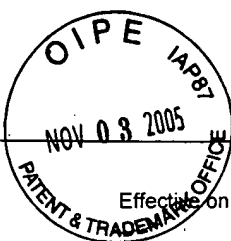
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: November 1, 2005

Thomas S. Ferrill

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**FEE TRANSMITTAL FOR FY 2005**

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**TOTAL AMOUNT OF PAYMENT (\$)** \$500.00

Complete if Known:

Application No. 09/896,563  
Filing Date June 28, 2001  
First Named Inventor Tony G. Hamilton, et al.  
Examiner Name Jude Jean Gilles  
Art Unit 2143  
Attorney Docket No. 042390.P11843

           Applicant claims small entity status. See 37 CFR 1.27.**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify)☒ Deposit AccountDeposit Account Number : 02-2666Deposit Account Name:                     ☒ The Director is Authorized to do the following with respect to the above-identified Deposit Account:☐ Charge fee(s) indicated below.☒ Charge any additional fee(s) or underpayment of fee(s) during the pendency of this application.☐ Charge fee(s) indicated below except for the filing fee☒ Credit any overpayments.☒ Any concurrent or future reply that requires a petition for extension of time should be treated as incorporating an appropriate petition for extension of time and all required fees should be charged.

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Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Large Entity		Small Entity		Fee Description		Fees Paid (\$)
Code	Fee (\$)	Code	Fee (\$)			
1011	300	2011	150	Utility application filing fee	} 1,000/500	<u>\$00.00</u>
1111	500	2111	250	Utility search fee		<u>\$00.00</u>
1311	200	2311	100	Utility examination fee		<u>\$00.00</u>
1012	200	2012	100	Design application filing fee	} 430/215	<u>          </u>
1112	100	2112	50	Design search fee		<u>          </u>
1312	130	2312	65	Design examination fee		<u>          </u>
1013	200	2013	100	Plant filing fee	} 660/330	<u>          </u>
1113	300	2113	150	Plant search fee		<u>          </u>
1313	160	2313	80	Plant examination fee		<u>          </u>
1004	300	2004	150	Reissue filing fee	} 1,400/700	<u>          </u>
1114	500	2114	250	Reissue search fee		<u>          </u>
1314	600	2314	300	Reissue examination fee		<u>          </u>
1005	200	2005	100	Provisional application filing fee		<u>          </u>
SUBTOTAL (1)						<u>\$ 00.00</u>

**2. EXCESS CLAIM FEES**

	<u>Extra Claims</u>	<u>Fee from below</u>	<u>Fees Paid (\$)</u>
<b>Total Claims</b> _____ <b>- 20 or HP =</b> _____		X <u>\$50.00</u>	= <u>00.00</u>
HP = highest number of total claims paid for, if greater than 20			
<b>Independent Claims</b> _____ <b>- 3 or HP =</b> _____		X <u>\$200.00</u>	= <u>00.00</u>
HP = highest number of independent claims paid for, if greater than 3			
<b>Multiple Dependent Claims</b> _____			= _____

<u>Large Entity</u>		<u>Small Entity</u>		
Code	Fee (\$)	Code	Fee (\$)	Fee Description
1202	50	2202	25	Each claim over 20
1201	200	2201	100	Each independent claim over 3
1203	360	2203	180	Multiple dependent claims, if not paid
1204	200	2204	100	Reissue: each claim over 20 and more than in the original patent
1205	50	2205	25	Reissue: each independent claim more than in the original patent

SUBTOTAL (2) \$ 00.00**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<u>Total Sheets</u>		<u>Extra Sheets</u>	<u>Number of each add'l 50 or fraction thereof</u>	<u>Fee from below</u>	<u>Fees paid (\$)</u>
_____	- 100 =	_____	/ 50 = _____ (round up to whole number)	X <u>\$250.00</u>	_____

<u>Large Entity</u>		<u>Small Entity</u>		
Code	Fee (\$)	Code	Fee (\$)	Fee Description: Application size fee for each additional group of 50 sheets beyond initial 100 sheets (count spec & drawings except sequences & program listings):
1081	250	2081	125	Utility
1082	250	2082	125	Design
1083	250	2083	125	Plant
1084	250	2084	125	Reissue

SUBTOTAL (3) \$ 00.00

**FEE CALCULATION (continued)****4. OTHER FEE(S)**

				<b>Fees Paid (\$)</b>	
Non-English Specification, \$130 fee (no small entity discount)					
<b>Large Entity</b>		<b>Small Entity</b>			
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1813	8,800	1813	8,800	Request for inter parties reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1,500	2453	750	Petition to revive - unintentional	
1501	1,400	2501	700	Utility issue fee (or reissue)	
1502	800	2502	400	Design issue fee	
1503	1100	2503	550	Plant issue fee	
1462	400	1462	400	Petitions to the Commissioner (CFR 1.17(f) Group I)	
1463	200	1463	200	Petitions to the Commissioner (CFR 1.17(g) Group II)	
1464	130	1464	130	Petitions to the Commissioner (CFR 1.17(h) Group III)	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	For filing a submission after final rejection (see 37 CFR 1.129(a))	
1814	130	2814	65	Statutory Disclaimer	
1810	790	2810	395	For each additional invention to be examined (see 37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
1504	300	1504	300	Publication fee for early, voluntary, or normal pub.	
1505	300	1505	300	Publication fee for republication	
1803	130	1803	130	Request for voluntary publication or republication	
1808	130	1808	130	Processing fee under 37 CFR 1.17(i) (except provisionals)	
1454	1,370	1454	1,370	Acceptance of unintentionally delayed claim for priority	
Other fee (specify) _____					
Other fee (specify) _____					

**SUBTOTAL (4) \$ 500.00**

\*Reduced by Basic Filing Fee Paid

**SUBMITTED BY:**Typed or Printed Name: Thomas S. FerrillSignature: Date: November 1, 2005Reg. Number: 42,532Telephone Number: 408-720-8300

Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

AF *ZW*



Attorney's Docket No.: 042390.P11843

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Patent Application of:

Tony G. Hamilton, et al.

Application No: 09/896,563

Filing Date: June 28, 2001

Examiner: Jude Jean Gilles

Art Unit: 2143

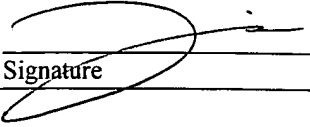
Confirmation No.: 7969

**For: A METHOD TO PROVIDE  
DIRECT SYSTEM STORAGE  
ACCESS WITHIN A NOTEBOOK  
COMPUTER VIA A WIRELESS  
INTERCONNECT AND A LOW  
POWER HIGH-SPEED DATA  
MANAGEMENT BUS WHILE THE  
MAIN CPU IS IDLE**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Group 2143, dated July 1, 2005, in which claims 17-40 in the above-identified application were finally rejected. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.	
on <u>Nov 1, 2005</u>	_____
Date of Deposit	
<u>Trina Chau</u>	_____
Name of Person Mailing Correspondence	
<u></u>	<u>Nov 1, 2005</u>
Signature	Date

11/03/2005 RFEKADU1 00000010 09896563 500.00 DP  
01 FC:1402

### **I. REAL PARTY IN INTEREST**

The real party in interest is the assignee of the full interest in the invention, Intel Corporation, 2200 Mission College Blvd. Santa Clara, CA 95052.

### **II. RELATED APPEALS AND INTERFERENCES**

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

### **III. STATUS OF THE CLAIMS**

Claims 17-40 are pending in the application and were finally rejected in an Office Action mailed July 1, 2005. Claims 17-40 are the subject of this appeal. A copy of Claims 17-40 as they stand on appeal is set forth in Appendix A.

### **IV. STATUS OF AMENDMENTS**

In response to the Final Office Action mailed July 1, 2005, rejecting claims 17-40, Appellants filed an Amendment After Final under 37 C.F.R. 1.116 with a Notice of Appeal on Sep. 1, 2005. The Notice of Appeal was received at the patent office on Sep. 6, 2005. A copy of all claims on appeal is attached hereto as Appendix A.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 17 claims a method for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle. (Specification, page 7, lines 11-21; page 4, lines 15-21; Figure 2). Thus, for instance, a notebook in its very deepest sleep state may have its system storage resources used to store or remove data. (Specification, page 4, lines 15-18). The data transfer is executed, and system resources are returned to an idle state. (Specification, page 9, lines 9-17; Figure 2).

Independent claim 27 claims a means for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle. (Specification, page 6, lines 19-21; Figure 1). Claim 27 further claims means for executing

the data transfer, and means for returning system resources to an idle state. (Specification, page 6, lines 16-18; Figure 1).

Independent claim 33 claims a machine-readable medium having executable instructions to cause a processor to perform a method for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle. (Specification, page 7, lines 11-21; page 4, lines 15-21; Figure 2). The data transfer is executed, and system resources are returned to an idle state. (Specification, page 9, lines 9-17; Figure 2).

Independent claim 38 claims a computer system that includes a processor coupled to a memory through a bus. (Specification, page 5, line 22 to page 6, line 8; Figure 1). The computer system further includes a unit to activate a storage device in a computer system to transfer data while the processor is idle. (Specification, page 6, lines 19-21; Figure 1). The unit executes the data transfer, and returns system resources to an idle state. (Specification, page 6, lines 16-18; Figure 1).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 17-40 stand rejected under 35 U.S.C. § 103(a) as being obvious under US Patent No. 6,829,704 B2 by Zhang, et al. (hereinafter “Zhang”) in view of U.S. Patent No. 5,530,879 by Crump, et al. (hereinafter “Crump”).

## **VII. ARGUMENTS**

### **A. NO MOTIVATION EXISTS TO COMBINE ZHANG WITH CRUMP TO ACHIEVE THE ELEMENTS OF APPELLANT’S INVENTION.**

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Manual of Patent Examining Procedure ¶ 2143).

The office action asserts that “it would have been obvious for an ordinary skill in the art at the time of the invention to incorporate the step of returning to an idle state of Crump with Zhang for the purpose of providing a method and a system to automatically activate

options resident in memory of a ... to prevent automatic installation of options during device operation as stated by Zhang in lines 24-28 of column 2.” (Final Office Action, pgs. 3-4).

The present Office Action does not direct the Appellant to any teachings within these references, which suggests combining Zhang with Crump to achieve Appellant’s claimed invention. No incentive exists in either references themselves that actually suggests combining Zhang’s teachings, to delay activation of inactive software applications resident in a memory of a device while the device is active, with Crump’s teachings, to provide a power management processor to provide multiple power states (normal operating state, standby state, suspend state, off state) for a computer system. Thus, no motivation exists in either reference to combine the teachings of Crump with the teachings of Zhang.

Further, Zhang discloses that in order to prevent automatic installation of options during device operation of the device, activation of the inactive options is delayed until the device is inactive. Zhang seems to teach away from automatic installation of options during device operation. It is not clear how a person of ordinary skill in the art would combine Crump with the power management processor in Zhang to prevent the automatic installation of options.

Applicants assert that the office action has not meet its burden to adequately supply motivation to combine the references under 35 U.S.C. 103. Correspondingly, withdrawal of the obviousness rejection of claims 17-40 is respectfully requested and allowance of such claims is requested.

B. THE 35 U. S. C. 103 REJECTION OF CLAIMS 17, 27, 33 AND 38 IS IMPROPER BECAUSE THE OFFICE ACTION IMPERMISSIBLY RELIES ON HINDSIGHT TO COMBINE ZHANG WITH CRUMP.

To prevent the use of hindsight an examiner "must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).(Also see MPEP 2142 as well as MPEP 2145). “Because the Board did not explain the *specific understanding* or principle *within* the knowledge of a skilled artisan that would motivate one with no knowledge of Rouffet’s [Appellant’s] invention to make the combination, this court infers that the examiner selected these references with the assistance



of hindsight.” *Id.* “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Lee*, No. 07/631,240, (Fed. Cir. Jan. 2002).

As noted above, the office action cites no hints or suggestions in either reference that actually suggests combination. On this basis alone, an improper combination of references based on presumed hindsight has occurred and withdrawal of the obviousness rejection is justified. Withdrawal of the obviousness rejection of claims 17-40 is respectfully requested and allowance of such claims is earnestly solicited.

C. THE 35 U. S. C. 103 REJECTION OF CLAIMS 17, 27, 33 AND 38 IS IMPROPER BECAUSE NEITHER ZHANG NOR CRUMP DISCLOSES, TEACHES, OR SUGGESTS APPELLANT’S CLAIMED ELEMENT.

The office action rejected independent claims 17, 27, 33 and 38 over Zhang in view of Crump. Patent law requires that the references combine to teach or suggest all of the limitations /elements of applicants claims. Independent claims 17, 27 and 33 each recite the limitation of “activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle.” Independent claim 38 recites “activate a storage device in a computer system to transfer data while the processor is idle.”

In contrast, Zhang discloses “a system and method of delaying activation of inactive options resident in memory of a device while the device is active or in use.” (Zhang, col. 2, lines 20-22). Zhang further discloses:

If the status [of the device, such as a medical imaging device,] is determined as active, the processor of the device prohibits activation and enablement of [inactive] software application [stored in memory] until device initialization or reboot. If, however, the status is an inactive status, then the device processor automatically activates and enables the software application with device reboot.

(Zhang, col. 2, line 64 to col. 3, line 3).

Thus, in contrast to activating an idle storage device while a main processor of the computer is idle, Zhang explicitly states that the device processor activates to enable the inactive software applications stored in memory. Further, activating inactive software applications stored in memory is not equivalent to activating an idle storage device.

Therefore, the device processor activating an inactive software application in the memory of a device is not equivalent to activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle.

Crump does not supply the missing elements. Crump discloses that a power supply of a computer system has several states, which are controlled by the power management processor responsive to the CPU, the switch, the modem, the timer, the glitch circuit, the override circuit, and the power management processor itself. (Crump, Abstract). Crump is silent on “activating an idle storage device...while the main processor is idle.” Thus, Crump does not teach or suggest activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle.

Because Zhang and Crump, either individually or in combination, do not teach or suggest each and every limitation of independent claims 17, 27, 33 and 38, withdrawal of the obviousness rejection of claims 17, 27, 33 and 38 and associated dependent claims is respectfully requested.

### **VIII. CONCLUSION**

Appellant submits that no motivation exists to combine Zhang with Crump to achieve the elements of Appellant's invention. Appellant submits that the 35 U. S. C. 103 rejection is improper because the office action impermissibly relies on hindsight to combine Zhang with Crump. Appellant submits that the 35 U. S. C. 103 rejection of the claims is further improper because neither Crump or Zhang discloses, teaches, or suggests Appellant's claimed element.

Appellant respectfully submits that all the appealed claims in this application are patentable and requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

#### **Fee for Filing a Brief in Support of Appeal**

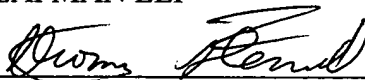
Enclosed is a check in the amount of \$500.00 to cover the fee for filing a brief in support of an appeal as required under 37 C.F.R. §§ 1.17(c) and 41.37(a).

#### **Deposit Account Authorization**

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Appellant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR  
& ZAFMAN LLP



Thomas S. Ferrill  
Registration No. 42,532

Dated: November 1, 2005

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Seventh Floor  
Los Angeles, CA 90025-1026  
(408) 720-8300 x309

**A. Appendix of claims**

1-16 (Cancelled)

17. (Previously Presented) A method, comprising:  
activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle;  
executing the data transfer; and  
returning system resources to an idle state.
18. (Previously Presented) The method of claim 17, further comprising:  
buffering the data for transfer.
19. (Previously Presented) The method of claim 17, further comprising:  
detecting a request for data transfer to activate the idle storage device while the main processor of the computer is idle.
20. (Previously Presented) The method of claim 19, wherein a controller activates the idle storage device by directing power to the device.
21. (Previously Presented) The method of claim 17, further comprising:  
tagging the transferred data for recognition.
22. (Previously Presented) The method of claim 17, further comprising:  
apportioning a system time and power resource based on the transferred data.
23. (Previously Presented) The method of claim 22, further comprising:  
returning the system resource to a pre-transfer state.
24. (Previously Presented) The method of claim 17, further comprising:

notifying a user of the computer system of the data transfer after the system is returned to an idle state.

25. (Previously Presented) The method of claim 17, wherein the data is transferred wirelessly.

26. (Previously Presented) The method of claim 17, wherein the data is transferred via a low level data bus.

27. (Previously Presented) An apparatus comprising:  
means for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle;  
means for executing the data transfer; and  
means for returning system resources to an idle state.

28. (Previously Presented) The apparatus of claim 27, further comprising:  
means for buffering the data for transfer.

29. (Previously Presented) The apparatus of claim 27, wherein the means for activating the idle storage device comprise a controller that detects a request for data transfer while the main processor of the computer is idle.

30. (Previously Presented) The apparatus of claim 29, wherein the controller activates the idle storage device by directing power to the device.

31. (Previously Presented) The apparatus of claim 27, wherein the data is transferred wirelessly.

32. (Previously Presented) The apparatus of claim 27, wherein the data is transferred via a low level data bus.

33. (Previously Presented) A machine-readable medium having executable instructions to cause a processor to perform a method, the method comprising:

activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle;

executing the data transfer; and

returning system resources to an idle state.

34. (Previously Presented) The machine-readable medium of claim 33, wherein the method further comprises:

buffering the data for transfer.

35. (Previously Presented) The machine-readable medium of claim 34, wherein the idle storage device is activated by a controller that detects a request for data transfer while the main processor of the computer is idle.

36. (Previously Presented) The machine-readable medium of claim 33, wherein the method further comprises:

apportioning a system resource based on the transferred data.

37. (Previously Presented) The machine-readable medium of claim 36, wherein the method further comprises:

returning the system resource to a pre-transfer state.

38. (Previously Presented) A computer system comprising:

a processor coupled to a memory through a bus;

a unit to activate a storage device in a computer system to transfer data while the processor is idle, the unit to

execute the data transfer, and the unit to

return system resources to an idle state.

39. (Previously Presented) The system of claim 38, further including a buffer to store data to be transferred.

40. (Previously Presented) The system of claim 38, further including a unit to detect a request for data transfer to activate the idle storage device while the main processor of the computer is idle.

**B. Evidence Appendix**

No additional evidence is being submitted with this appeal brief.



**C. Proceeding Appendix**

No other related proceedings exist at this time.